

What is claimed is:

1 1. A method comprising:

2 inserting a vector in a packet that identifies a first
3 device in a stack of packet forwarding devices to receive the
4 packet.

1 2. The method of claim 1 further comprising:

2 using the vector and a table to determine a port for
3 sending the packet to the first device in the stack of packet
4 forwarding devices.

1 3. The method of claim 2 further comprising:

2 copying the packet for sending through a second port
3 identified by using the vector and the table.

1 4. The method of claim 1 wherein the vector includes a bit
2 identifying the first device in the stack of packet forwarding
3 devices to receive the packet.

1 5. The method of claim 1 further comprising:

2 removing the vector from the packet for sending the
3 packet to a second device external to the stack of packet
4 forwarding devices.

1 6. The method of claim 1 wherein the first device includes a
2 router.

1 7. The method of claim 1 wherein the vector includes bits
2 respectively identifying packet forwarding devices in the
3 stack.

1 8. A computer program product, tangibly embodied in an
2 information carrier, the computer program product being
3 operable to cause a machine to:

4 insert a vector in a packet that identifies a first
5 device in a stack of packet forwarding devices to receive
6 the packet.

1 9. The computer program product of claim 8 being further
2 operable to cause a machine to:

3 use the vector and a table to determine a port for
4 sending the packet to the first device in the stack of
5 packet forwarding devices.

1 10. The computer program product of claim 9 being further
2 operable to cause a machine to:

3 copy the packet for sending through a second port
4 identified by using the vector and the table.

1 11. The computer program product of claim 8 the vector
2 includes a bit identifying the first device in the stack of
3 packet forwarding devices to receive the packet.

1 12. A computer program product of claim 8 being further
2 operable to cause a machine to:

3 remove the vector from the packet for sending the
4 packet to a second device external to the stack of packet
5 forwarding devices.

1 13. The computer program product of claim 8 wherein the first
2 device includes a router.

1 14. The computer program product of claim 8 wherein the
2 vector includes bits respectively identifying packet
3 forwarding devices in the stack.

1 15. A packet forwarder comprises:

2 a process to insert a vector in a packet that
3 identifies a first device in a stack of packet forwarding
4 devices to receive the packet.

1 16. The packet forwarder of claim 15 further comprising:

2 a process to use the vector and a table to determine
3 a port for sending the packet to the first device in the
4 stack of packet forwarding devices.

1 17. The packet forwarder of claim 15 further comprising:

2 a process to remove the vector from the packet for
3 sending the packet to a second device external to the
4 stack of packet forwarding devices.

1 18. A system comprising:

2 a switch device capable of,
3 inserting a vector in a packet that identifies
4 a first device in a stack of packet forwarding
5 devices to receive the packet.

1 19. The system of claim 18 wherein the switch device is
2 further capable of:

3 using the vector and a table to determine a port for
4 sending the packet to the first device in the stack of
5 packet forwarding devices.

1 20. The system of claim 18 wherein the switch device is
2 further capable of:

3 removing the vector from the packet for sending the
4 packet to a second device external to the stack of packet
5 forwarding devices.

1 21. A packet forwarding device comprising:

2 an input port for receiving a packet;
3 an output port for delivering the received packet;
4 and

5 a switch device capable of,
6 inserting a vector in the received packet that
7 identifies a first device in a stack of packet
8 forwarding devices to receive the packet.

1 22. The packet forwarding device of claim 21 wherein the
2 switch device is further capable of:

3 using the vector and a table to determine the output
4 port for sending the received packet to the first device
5 in the stack of packet forwarding devices.

1 23. The packet forwarding device of claim 21 wherein the
2 switch device is further capable of:

3 removing the vector from the received packet for
4 sending the received packet to a second device external
5 to the stack of packet forwarding devices.

1 24. A router comprising:

2 a switch device capable of inserting a device vector
3 a packet that identifies a first device in a stack of
4 packet forwarding devices to receive the packet.

1 25. The router of claim 24 wherein the switch device is
2 capable of using the device vector and a stack device table to
3 determine a port for sending the received packet to the first
4 device in the stack of packet forwarding devices.

1 26. The network switch of claim 24 wherein the switch device
2 is capable of removing the device vector from the received
3 packet for sending the received packet absent the device
4 vector to a second device external to the stack of packet
5 forwarding devices.